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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

*O. N. Tittmann*  
Superintendent.

State: *Virginia*

DESCRIPTIVE REPORT.

*June* Sheet No. *3037*

LOCALITY:

*Nansemond River*

1909

CHIEF OF PARTY:

*J. B. Boutelle*

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C. & G. SURVEY,  
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with 3037 2455

Department of Commerce and Labor  
 • COAST AND GEODETIC SURVEY

*A. Littmann*  
 Superintendent.

State: *Va.*

DESCRIPTIVE REPORT.

Sheet No.

LOCALITY:  
*Nausemon River*

1909

CHIEF OF PARTY:  
*J. M. Boutelle*

3037 & 3039 (1)

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DESCRIPTIVE REPORT

To accompany hydrographic sheets Nos.....(see tracings accompanying topographic sheets Nos. 1352, a and b and 1353.)

NANSEMOND RIVER, VA--HAMPTON ROADS  
to SUFFOLK with supplementary topography,

---10/10/10/10/10---

METHOD OF SURVEY: The stations Barrel 2 and Pig 1909 were determined by triangulation from the old stations, West Base 2, Newport News Mid.Grd. Lt. Ho., and Nansemond River Lt. Ho. From these stations a plane table triangulation was carried up the river determining signals for the hydrographic work and all changes in the shore line, new wharves buildings etc. This topographic work was done on tracing vellum laid over the old topographic sheets Nos. 1353 and 1352 a and b.

Preliminary hydrographic work showing some changes in the channel soundings were carried over the entire channel from the entrance buoy to the town of Suffolk especial attention being paid to those areas marked for examination on a chart sent from the office.

Very little change was found in the shore line of the river, the marsh line had grown out a short distance in various places and several new wharves built. A few new houses

were also determined.

TIDE GAUGES: Tide gauges were established at Newport News and at Gaskins Landing on the east side of the river 5 miles above Nansemond River Lt. Ho. An old gauge was found on the outer end of the bulkhead opposite the mouth of Western Branch about 6 miles below Suffolk, (at station "Bulk"). This gauge was referred to the one at Gaskins Landing, and was used while sounding the narrow creek that runs from that place to Suffolk.

- - - - -

The traffic on the river consists of one small steamer that makes a daily trip between Norfolk and Suffolk and small tugs towing barges and small schooners between Suffolk and Newport News and Norfolk.

The present survey shows that about 9 feet draft can be carried from the mouth of the river to Suffolk.

MEMO. FOR DRAWING DEVISION:

The soundings have been reduced in the field and plotted on the 3 boat sheets used and then transferred to the above mentioned tracings for comparison with the old surveys.

The 3 boat sheets, two projections with signals plotted and a list of the geographic positions of all signals used are transmitted with this report.

The tracings have been transmitted with the topographic sheets mentioned.

Respectfully submitted,  
*J. D. Bortelle* Ass't C. & G. Survey,  
Com'd'g U.S.S. "Endeavor".

# GEOGRAPHICAL

Locality Nansemond River, Va. (topographic and hydrographic signals)

11-676

1909.

STATIONS.	LATITUDE.		Seconds in Meters.	LONGITUDE.		Seconds in Meters.
	°	' "		°	' "	
N. News Mid. Grd. Lt. Ho. (Mid)	36	56 42.578	1312.4	76	23 30.328	750.5
Nansemond River Lt. Ho. (N.L.H)	36	54 52.760	1626.4	76	26 39.919	988.0
West Base 2.	36	53 52.187	1608.8	76	24 16.220	401.6
Pig, 1909.	36	54 15.552	479.4	76	26 46.138	1142.2
Barrel 2.	36	54 59.190	1824.5	76	28 53.738	1330.1
Fish.	36	54	157	76	27	390.
Com.	36	54	1422.	76	28	1192.
Peg.	36	54	751.	76	28	1220.
Gab.	36	53	798.	76	27	123.
Son.	36	53	1556.	76	29	38.
Pat.	36	53	1470.	76	29	12.
Nan.	36	53	22.	76	28	58.
Chick.	36	53	935.	76	29	928.
Smoke, (Chy. on gable facing R)	36	52	1517.	76	29	430.
Prom, (flag on SW. gable whf. Ho)	36	52	1636.	76	29	1300.
Tab.	36	52	1508.	76	29	1064.
Wind (windmill)	36	52	1468.	76	29	920.
Vane, (vane on cupola of lg. Ho)	36	52	1450.	76	29	977.
Will (flag on S. gable whf. Ho)	36	52	1570.	76	30	340.
Top.	36	52	1620.	76	30	843.
Bank.	36	52	344	76	29	1090.
Join.	36	52	707.	76	30	1449.
End (flag on gable of whf. Ho)	36	52	84.	76	30	857.
Met.	36	52	22.	76	30	669.

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# POSITIONS.

*State*

AZIMUTH.

BACK AZIMUTH.

TO STATIONS.

DISTANCE.

LOGARITHMS.

Meters.

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# GEOGRAPHICAL

Locality Wansemond River, Va., (hydrographic and topographic signals)

11-876

1909

STATIONS.	LATITUDE.		Seconds in Meters.	LONGITUDE.		Seconds in Meters.
	°	' "		°	' "	
Old, (SW. <sup>chy.</sup> corner of house)	36	51	1693	76	31	826
Red. ( <i>Barn n.e. gable</i> )		51	1081		30	629
Lit.		51	777		31	865
Low.		51	632		31	394
Rox (Ho. SW. Chy.)		51	309		31	203
Mill.		51	117		31	1396
Chim.		51	88		31	1350
Fig.		51	24		31	1330
Din.		50	1445		31	30
Sleep.		50	856		31	1353
Dirt.		50	1177		32	772
Cup. (barr. cupola)		50	803		33	892
Fence.		50	680		33	928
Nig.		50	630		32	1377
God.		50	526		33	49
Dry.		49	1816		33	1037
Pot.		50	93		32	763
Coon.		49	1754		32	1395
Bell.		49	1705		32	1254
Wet.		49	1452		33	396
Mink.		49	1146		33	396
Nut.		49	973		33	1181
Pin.		49	668		33	102
Hen.		49	118		33	147
Odd.		49	27		33	550
Trap.		48	1222		33	608
Per.		48	1064		33	956
Sim.		48	594		33	836
Mon.		48	624		33	628
Brick.		48	133		33	982
Yard.		48	72		33	1046
Dig.	36	47	1616	76	33	495

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# POSITIONS.

*State*

AZIMUTH.

BACK AZIMUTH.

TO STATIONS.

DISTANCE.

LOGARITHMS.

° / "

° / "

Meters.

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# GEOGRAPHICAL

Locality *Nansemond River, Va. (hydrographic and topographic signals)*

11-876

1 9 0 9.

STATIONS.	LATITUDE. °   '   "	Seconds in Meters.	LONGITUDE. °   '   "	Seconds in Meters.
Mud.	36 47	1320	76 33	1218
Buck.	47	607	33	986
Hook.	47	577	33	644
Last.	36 47	50	76 33	882

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# POSITIONS.

*State*

AZIMUTH.

BACK AZIMUTH.

TO STATIONS.

DISTANCE.

LOGARITHMS.

Meters.

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3039

Department of Commerce and Labor

Hyd. Sheets 3037, 3039+3037<sup>a</sup> July 28, 1910

From the mouth of the river to signal Last the channel is well developed. From Last to the town of Suffolk, only single lines was run which probably does not follow the channel in all places. The Engineers Report of 1909 states that 11 ft. can be carried to Suffolk

The sounding records are clear and well kept

H. L. Simons  
S. J.

Copy S. J.

See Descriptive Report of 3037 for statistics.

V.E.C.  
Apr. 11, 1910:

HYDROGRAPHIC SHEET 3037.

6/13/10

Nansemond River, Virginia, by Asst. J. B.  
Boutelle in 1909.

TIDES.

	Newport News	Gaskins Landing	Bulkhead
	ft.	ft.	ft.
Mean low water, or plane of reference on staff	1.8	1.7	0.0
Lowest tide observed	" " 0.0	1.4	0.2
Highest " " " "	6.6	6.1	3.2
Mean range of tide	2.6	2.8	3.1

Coast and Geodetic Survey  
APR 11 1910  
TIDAL DIVISION.

V.E.C.  
Apr. 11, 1910.

HYDROGRAPHIC SHEET 3039.

*J. B. B.*  
*Arz*

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Coast and Geodetic Survey  
APR 11 1910  
TIDAL DIVISION.

TABLE OF STATISTICS

Hydrographic resurvey of channel  
of

NANSEMOND RIVER, VA.

Chief of Party

J. B. Routelle, Asst. C. & G. Survey.

C. & G. SURVEY  
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3037

Date. 1909.	Letter	Vol.	Positions	Soundings	Miles Statute	Vessel.
November 21	a	1	77	624	8.7	Gig.
13	b		39	211	2.7	"
16	c		41	229	2.9	"
18	d		8	50	0.4	"
19	e		95	538	6.0	"
19	e	2	16	91	1.1	"
23	f		73	457	5.2	"
December 6	l		16	81	1.0	"
10	n		9	48	0.7	"
November 26	g	3	101	798	9.0	"
27	h		86	667	8.3	"
29	i		62	419	4.3	"
December 3	j	4	103	1004	12.0	"
4	k		65	639	7.0	"
8	m		43	273	3.5	"
November 20	A	5	65	727	16.7	ENDEAVOR.
December 6	B		99	701	12.0	"
10	F		44	193	3.0	"
7	C	6	36	273	4.3	"
8	D		61	449	6.0	"
9	E		45	214	6.5	"

Totals:-: 1184 : 8686 : 121.3

Tide Gauges at Newport News, Lat. 36° 58' 30.1" Long. 76° 26' 03.1"  
 Gaskins Landing, " 36° 52' 02.6" " 76° 30' 34.8"  
 Bulkhead, " 36° 47' 19.6" " 76° 33' 39.8"

Plane of reference is mean L.W. =1.97 ft. on staff at Newport News.  
 " " " " " 1.97 " " " " Gaskins Landing.  
 " " " " " 0.4 " " " " Bulkhead.

3039<sup>a</sup> & 3037<sup>a</sup>

Hyd. Sheets 3037, 3039 + 3037<sup>e</sup>

July 28 1910

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H. L. Simmons